THE RECOVERY KERNEL

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R5P (Riboflavin-5'-Phosphate — □□□□□□□□□□□ B2 / FMN)	□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□ □□□□□□□□□□□□, □□□□□□ MTHFR (□□□□□□□□□□ C677T □□□□□□ □□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□, □□□□□□□□□□ □□□□□ □□□□□ □□□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□□□□□□□□□ □□□□□□□□ FAD-□ □□□□□□□□□□) □□□□□□□□ MAOA □□□□□□□ □□□□□□□□□.	ΔFosB-□□□□□□□□□ □□□□□□□ □□□□ □□□□□□, □□□□□□□□□□□□□□□ □□□□□, MTHFR □□□□□□□□ MAOA □□□□□□□□ □□□□□□□□□□□□□□□□□ □□□□□□□□□ □□□□□□□□□□□□□, □□□□□□□ □□□□□ □□□□□□□□□□□□□□□□ ΔFosB-□□□□□ □□□□□□ □□□□□□□□ □□□□□□□□□□ □□□□□□□ □□□□□□□□□□□□□□□□□□□□□□□□ (□□□□□□ 6, □□□□□ 4). [□□□□□□, □□□□□□□□□□]
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[illegible]	[illegible]	[illegible]	[illegible]
		[illegible], [illegible] [illegible] [illegible] [illegible] [illegible].	
FOSB Ser27Glu (S27E) — [illegible].	[illegible] [illegible] [illegible], [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] - [illegible] [illegible] [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible], [illegible] [illegible] CK2 [illegible]; [illegible] [illegible], [illegible] [illegible] [illegible] [illegible].	[illegible] [illegible] (FOSB [illegible], [illegible]).
FOSB [illegible]-4/[illegible]-4 [illegible] [illegible].	PCBP1/SMAD3 [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible].	[illegible], degron-[illegible] [illegible] FosB [illegible] [illegible], [illegible] [illegible]. [illegible] [illegible] ΔFosB [illegible] [illegible].	[illegible] (FOSB [illegible]).

[illegible] 2 — [illegible] [illegible] [illegible].

[illegible], ΔFosB [illegible] [illegible] [illegible] [illegible]-[illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible], [illegible] [illegible] ΔFosB [illegible] [illegible] - [illegible], [illegible] [illegible] [illegible].

[illegible]	[illegible].	[illegible] [illegible].	[illegible].
CSNK2A1 / CSNK2B (CK2 [illegible] [illegible] [illegible] [illegible])	[illegible] [illegible] [illegible] [illegible] [illegible].	[illegible] CK2 [illegible], ΔFosB-[illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] - [illegible] [illegible] [illegible].	[illegible] (FOSB [illegible], [illegible]).
PCBP1 / SMAD3	[illegible], ΔFosB [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] (FosB) [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] (ΔFosB) [illegible] [illegible] [illegible] [illegible] [illegible].	[illegible] (FOSB [illegible], [illegible]).
ACVR1B (ALK4 [illegible]).	SMAD3/PCBP1 [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] D1 [illegible] [illegible] [illegible].	[illegible] [illegible], ΔFosB-[illegible] [illegible] [illegible] [illegible] - [illegible] [illegible] [illegible] [illegible] [illegible].	[illegible] (FOSB [illegible], [illegible])

[illegible] 3 — [illegible] [illegible] [illegible] [illegible].

[illegible] [illegible] [illegible] [illegible]-[illegible] [illegible] - [illegible], [illegible] [illegible] [illegible], [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible], ΔFosB-[illegible]. ΔFosB [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible]. "[illegible] [illegible]" [illegible] [illegible], [illegible] [illegible] [illegible] [illegible]:

[illegible] / [illegible]	[illegible].	**ΔFosB** [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible].
DRD1 ([illegible] D1 [illegible]) [illegible].	D1 [illegible], PKA/CREB [illegible] [illegible] [illegible], [illegible] FOSB [illegible].	[illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible], [illegible] ΔFosB [illegible] [illegible] [illegible].
CHRNB2 rs2072661	[illegible] [illegible] [illegible] [illegible] 3' UTR [illegible], [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] ΔFosB [illegible] [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] ΔFosB [illegible] [illegible] [illegible] [illegible].	[illegible]: [illegible] [illegible] [illegible], ΔFosB [illegible] [illegible], [illegible] [illegible] [illegible] [illegible]; ΔFosB [illegible] [illegible] [illegible], [illegible].
DBH rs1541333	[illegible] [illegible]- [illegible] [illegible] [illegible], [illegible] [illegible] [illegible].	[illegible]/[illegible] [illegible] [illegible], [illegible] ΔFosB [illegible] [illegible] [illegible] [illegible] [illegible].	[illegible]: [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] ΔFosB [illegible] [illegible].

[illegible] 4 — [illegible] [illegible] [illegible] [illegible].

[illegible] [illegible] [illegible] (23andMe [illegible] [illegible], [illegible] [illegible] [illegible] Recovery Kernel [illegible] [illegible]) [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] ΔFosB [illegible] [illegible] [illegible] [illegible] [illegible] - [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible]	[illegible] [illegible] [illegible] [illegible].	**ΔFosB** [illegible] [illegible] [illegible].
COMT	[illegible]/[illegible] [illegible] [illegible], [illegible] [illegible]. Val/Val = [illegible] [illegible]; Met/Met = [illegible] [illegible].	[illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible]. [[illegible]/[illegible] [illegible]]
MTHFR	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].	ΔFosB [illegible] [illegible] [illegible] [illegible]. [[illegible]]
OPRM1 (A118G)	[illegible] [illegible]-[illegible] [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible] [illegible] [illegible]; [illegible] ΔFosB [illegible] [illegible] [illegible]. [[illegible] [illegible]]

[illegible]	[illegible] [illegible] [illegible] [illegible].	**ΔFosB** [illegible] [illegible] [illegible].
GABRA2	GABA-A [illegible] [illegible]; [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible]
FAAH (C385A)	[illegible] [illegible]; A- [illegible] [illegible] [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible]
MAOA	[illegible], [illegible], [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible]/[illegible] [illegible]
SLC6A4 (5-HTTLPR)	[illegible] [illegible] [illegible]; [illegible] [illegible] [illegible] [illegible] [illegible].	[illegible] [illegible] ΔFosB [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible]
ALDH2	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]; [illegible] [illegible] [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] ΔFosB-[illegible] [illegible]. [illegible]/[illegible], [illegible] [illegible]
CYP2D6, CYP3A4, CYP2C19, CYP1A2, CYP2C9, CYP2B6	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] ΔFosB [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible]-[illegible] [illegible] [illegible]. [illegible]/[illegible] [illegible], [illegible]].
HNMT	[illegible] [illegible] [illegible] [illegible].	ΔFosB [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] ΔFosB [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible]. FOSB [illegible] [illegible] [illegible] [illegible] [illegible] (CK2, PCBP1, SMAD3, ACVR1B) [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]. [illegible] FOSB [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible], [illegible] [illegible] [illegible], [illegible] Tier 1 [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]; [illegible], [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible] [illegible] [illegible] [illegible] **(WGBS).**

[illegible] [illegible] [illegible] [illegible] [illegible].

WGBS [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] DNA [illegible] - [illegible] [illegible] [illegible] [illegible] - [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] ([illegible] "WGBS 30x" [illegible] [illegible], [illegible] [illegible] [illegible] 30 [illegible] [illegible] [illegible]) [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. Sequencing.com [illegible] WGBS-30x [illegible], [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible].

[illegible] [illegible] "[illegible] [illegible]" [illegible] [illegible] (chr 19.[illegible].[illegible]-[illegible] [illegible] [illegible]), [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible]: ΔFosB-[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] WGBS [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible]; [illegible] [illegible] [illegible]... [illegible] ΔFosB [illegible] [illegible], [illegible] [illegible] [illegible] [illegible].

> WGBS [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible], [illegible] [illegible] [illegible], "[illegible] ΔFosB [illegible] [illegible] [illegible]" [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible].

8. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible]/[illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], "Recovery Kernel" [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] - [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

- [illegible] [illegible]. [illegible] 2-[illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] ΔFosB [illegible] [illegible] [illegible] - [illegible], [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] (DAT [illegible], mu-[illegible] [illegible], GABA-A [illegible] [illegible]). [illegible] [illegible] [illegible] [illegible] [illegible], [illegible], [illegible] ΔFosB [illegible] [illegible] [illegible]; [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible], [illegible] ΔFosB [illegible] [illegible].

- [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible], ΔFosB-[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible], [illegible] [illegible] (Table 4) [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible].
- [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible], ΔFosB-[illegible] [illegible] [illegible] [illegible] [illegible] - [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible].

[illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. Recovery Kernel [illegible], [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] (Figure 3-[illegible] [illegible] [illegible]) [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible].

9. [illegible] [illegible] - [illegible] [illegible] [illegible] (Figure, [illegible], [illegible])

"[illegible]" [illegible] [illegible] [illegible] [illegible] - [illegible] [illegible] [illegible], [illegible] ("[illegible]") [illegible] [illegible], [illegible] [illegible]/[illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] - [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] - [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

- [illegible] [illegible] [illegible] ([illegible] 8) - [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible].

[illegible] [illegible] [illegible] [illegible] ΔFosB [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] (Pitchers et al., 2010, [illegible] [illegible] [illegible], [illegible] [illegible] ΔFosB [illegible] [illegible]) [illegible] [illegible] [illegible] [illegible] (nucleus accumbens), [illegible].[illegible] (VTA), [illegible] [illegible] [illegible] (prefrontal cortex) [illegible] ΔFosB [illegible] [illegible] [illegible] - [illegible], [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible]; [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible].

- [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

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[illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] "[illegible]" [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible].

[illegible] [illegible] [illegible] [illegible] [illegible]: [illegible] [illegible] [illegible], [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] (Часть III - [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] I - [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]).